The Office Action objects to the drawings, specifically stating that the features of claims 11-12, 14, 22-23, 26-27 and 31-34 must be shown or the features canceled from the claims. This assertion is respectfully traversed.

Applicants respectfully submit that the features of claims 11, 12, 14, 31, 32 and 33 are clearly illustrated in the drawings as the features of these claims are referred to by reference number in the claims with respect to Figures 1-5. Regarding claims 26 and 27 the Applicants submit that there is now support in the specification for a hydraulic motor and a pneumatic motor. Attached hereto is a Request for Approval of Drawing Corrections wherein the features of claims 22 and 23 have been shown. Approval of the Request for Drawing Corrections is respectfully requested.

II. The Specification Satisfies Formal Requirements

The Office Action objects to the specification as failing to provide proper antecedent basis for the feature "a diamond coating" of claim 24. By this Amendment, the specification has been amended to provide proper antecedent basis for this feature. Withdrawal of the objection is respectfully requested.

III. The Claims Satisfy 35 U.S.C. §112, First Paragraph

The Office Action rejects claims 8, 11-12, 14, 22-23, 26-28 and 31-34 under 35 U.S.C. §112, first paragraph. This rejection is respectfully traversed.

By this Amendment, the specification has been amended to provide support for claims 8, 14, 26-28 and 34. Withdrawal of the rejection of these claims is respectfully requested.

Applicants submit that claim 11 is clearly supported in Figure 2, where the piston 10 is illustrated as rotatably held within the cylinder space 38. The specification has also been amended to describe this feature. It is further submitted that the subject matter of claim 12 is supported within the specification at page 5, lines 20-21, where it is stated that "the screw 11 is rotatably and translatably held in a cylinder space 59 defined by insert ring 58 inserted in

nut 14 of the screw mechanism 5." Withdrawal of the rejection of claims 11 and 12 is respectfully requested.

It is further submitted that the subject matter of claims 22 and 23 is supported in the specification on page 3, lines 5-9, where it is stated "also, control means may be provided, said control means having an input for a control signal, e.g. from a brake pedal, and being connected to the sensor for controlling the electric motor on the basis of the control signal and the signal from the sensor." Withdrawal of the rejection of claims 22 and 23 is respectfully requested.

The subject matter of claim 31 is supported within the specification at page 2, lines 16-17, where it is stated "the reduction gear means is preferably contained in a reduction gear module and the screw mechanism is contained in a screw mechanism module." The subject matter of claim 32 is supported in the specification at page 2, lines 20-21, where it is stated "the motor drive module can be mounted in line with the actuator or in angled position." Withdrawal of the rejection of claims 31 and 32 is respectfully requested.

It is submitted that the subject matter of the features of claim 33 are fully supported within the figures, as each element within claim 33 is numbered with respect to Figures 1-5. Withdrawal of the rejection of claim 33 is respectfully requested.

IV. The Claims Satisfy 35 U.S.C. §112, Second Paragraph

The Office Action rejects claims 6, 8, 18 and 24 under 35 U.S.C. §112, second paragraph. Although claim 8 is not addressed in the opening section of this rejection, claim 8 is addressed in the body. Thus, Applicants assume that it was the Examiner's intention to also reject claim 8. This rejection is respectfully traversed.

By this Amendment, claims 6, 18 and 24 have been amended to correct the cited discrepancies. The specification has also been amended to provide a description of the

features of claim 8. Withdrawal of the rejection of claims 6, 8, 18 and 24 is respectfully requested.

V. Rejection Under 35 U.S.C § 102

The Office Action rejections claims 1, 4-7, 9, 13, 15, 21, 25 and 29-30 under 35 U.S.C. §102(b) as being anticipated by Fujita et al. This rejection is respectfully traversed.

By this Amendment, claim 1 has been amended to recite "wherein the nut (14) is axially fixed with respect to the housing (17)". Fujita fails to disclose this feature.

In contrast, Fujita discloses a nut that is rotationally fixed, but axially movable within its respective housing. See Figure 1 of Fujita. As such, Fujita fails to disclose each and every feature of the claimed invention.

For at least these reasons it is respectfully submitted that claim 1 is distinguishable over the applied art. Claims 4-7, 9, 13, 15, 21, 25 and 29-30, which depend from claim 1, are likewise distinguishable over the applied art for at least the reasons discussed as well as for the additional features they recite. Withdrawal of the rejection is respectfully requested.

VI. Rejection Under 35 U.S.C § 103

The Office Action rejects claims 1, 2, 4-9, 13, 16-17, 25 and 29-30 under 35 U.S.C. §103(a) as being unpatentable over WO 97/17553 in view of Taig. This rejection is respectfully traversed.

The Office action asserts that WO 97/17553 discloses a screw mechanism that comprises a screw 51 and a nut 52. This assertion is respectfully traversed. Specifically, element 52 of WO 97/17553 is, in fact, only an opening in the housing itself and as such, cannot be considered to be the nut of the claimed invention.

Taig fails to overcome the deficiencies of WO 97/17553 in that it also fails to disclose a nut that is "axially fixed with respect to the housing." As such, neither WO 97/17553 nor Taig, alone or in combination, disclose each and every feature of the claimed invention. For

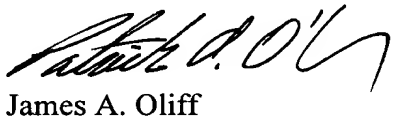
at least these reasons, it is respectfully submitted that claim 1 is distinguishable over the applied art. Claims 2, 4-9, 13, 16-17, 25 and 29-30 which depend from claim 1, are likewise distinguishable over the applied art for at least the reasons discussed, as well as for the additional features they recite. Withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

VII. Conclusion

It is respectfully submitted that this application is in condition for allowance.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



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Attachments:
Appendix
Request for Approval of Drawing Corrections

APPENDIX

Changes to Specification:

Page 2, lines 16-17:

The reduction gear means is preferably contained in a reduction gear module and the crew mechanism is contained in a screw mechanism module. These modules may be in laterally shifted positions.

Page 2, between lines 21 and 22, a new paragraph is added.

Page 2, line 30 - page 3, line 2:

The sun gear wheel of the reduction gear means is connected to an angled or right angle gear reduction e.g. a bevel gear which mates with a motor driven bevel pinion. Said sun gear wheel and the bevel gear are carried out as a unitary gear wheel which is supported with respect to the nut of the screw mechanism by means of a rolling element bearing. In order to achieve an appropriate reduction, the pitch diameter of the bevel gear is larger than the pitch diameter of the sun gear wheel. The screw, nut, rolling elements and reduction gear components may be obtained by hard turning.

Page 3, lines 27-29:

The displaceable brake pad 3 engages a ball screw mechanism 5 which by means of reduction gear means 6 is driven by motor 7. Said motor may be a hydraulic or pneumatic motor. Said motor 7 may be provided with a sensor 40, connected to the motor shaft. The screw mechanism may have a coating such as a diamond like carbon coating.

Page 3, line 30 - page 4, line 2:

More in particular, the displaceable brake pad 3 is connected by means of bolt 8 and screwthreaded hole 9 to an actuating member 10. Said actuating member 10 engages the screw 11 by means of a bearing 12 capable to take up axial load. In other exemplary embodiments the screw (11) may be rigidly connected to the actuating member. Said

actuating member is carried out as a piston 10, which is slidably, but non-rotatably held in a cylinder space 38 in the housing 17. In other exemplary embodiments the piston may be rotatably held in the cylinder space 38.

Changes to Claims:

The following are marked-up versions of the amended claims:

1. (Amended) Screw actuator, comprising a housing (17), a motor (7), an actuating member (10) and a screw mechanism (5) which provides a linear movement of the actuating member with respect to the housing in response to a rotational movement of the motor (7), which screw mechanism (5) comprises a screw (11), a nut (14) engaging each other by rolling elements (13), one of said screw (11) and nut (14) being rotatably supported with respect to the housing (17), and a reduction gear means (6), ~~characterized in that~~wherein the nut (14) is axially fixed with respect to the housing (17), and the screw (11) is rotatably supported with respect to the housing by means of the rolling elements (13).

6. (Amended) Actuator according to claim ~~6~~4, wherein the reduction gear means comprises ~~gear reduction steps of a different type, such as~~at least one of a planetary gear reduction step (25-28) and a right angle gear reduction step (28-31).

18. (Amended) Actuator according to claim 17, wherein the sun gear wheel (28) of the reduction gear means (6) is connected to a bevel gear (29) which mates with a motor gear, ~~e.g.~~by an angled or right angled gear transmission (32).

24. (Amended) Actuator according to any of the preceding claims, wherein balls or rollers (13) of the screw mechanism (5) are coated so as to maintain the proper function of the screw (11) under dry-running conditions ~~such as~~with a diamond-like carbon coating.